

Appl. No. 09/827,671  
Amendment dated January 7, 2005  
Reply to office action of September 7, 2004

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of claims:**

1 1. (currently amended) A single-channel RF weather monitoring and display system displaying  
2 information at one location representative of weather monitored at multiple, other locations remote  
3 from said one location, comprising:  
4 a portable, battery-powered and hand-holdable weather station adapted for home and office  
5 use, deployable at each of said remote locations, including a hand-holdable housing; a sensor  
6 connected to said housing for measuring a predetermined parameter representative of the weather  
7 prevailing in the environ of said sensor at the location where said station may be deployed; an  
8 antenna mounted to said housing; means for setting station ID; and a processor-controlled  
9 transmitter mounted in the housing and coupled to said sensor, said station ID setting means and  
10 said antenna repetitively operative (1) to compile a data packet having information representative  
11 of station ID and of said weather parameter sensed by said sensor at said location where said  
12 station may be deployed, (2) to generate a unique schedule of at least one transmission times in  
13 such a way that the unique schedule of at least one transmission times does not overlap in time  
14 with that of other remote locations where portable, battery-operated and hand-holdable weather  
15 stations may be deployed and, in accord therewith, to schedule a time to transmit said data packet,

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16 and operative (3) to modulate a predetermined-frequency RF carrier wave to transmit said data  
17 packet at said scheduled time to enable at said one location contention-free receipt over said single-  
18 channel of data packets transmitted from said multiple, remote locations where portable, battery-  
19 powered and hand-holdable weather stations may be deployed; and  
20 a portable base station adapted for home and office use, deployable at said one location,  
21 receiving said data packet and displaying said weather parameter sensed by each said portable,  
22 battery-powered and hand-holdable weather station adapted for home and office use.

1 2. (original) The single-channel RF weather monitoring and display system displaying information  
2 at one location representative of weather monitored at multiple, other locations remote from said  
3 one location of claim 1, wherein said unique schedule is a random schedule.

1 3. (original) The single-channel RF weather monitoring and display system displaying information  
2 at one location representative of weather monitored at multiple, other locations remote from said  
3 one location of claim 1, wherein said unique schedule is a schedule of predetermined times.

1 4. (original) The single-channel RF weather monitoring and display system displaying information  
2 at one location representative of weather monitored at multiple, other locations remote from said

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one location of claim 3, wherein said predetermined times are determined as two phase schedules consisting of alternating transmit times defined by {period + phase} and {period - phase}.

5. (currently amended) A battery-powered RF weather monitoring and display system, comprising:

a portable, battery-powered and hand-holdable weather station adapted for home and office use, deployable at a remote location to monitor a predetermined weather parameter and transmit the monitored weather parameter to a remote, battery-powered base weather station for display, including a hand-holdable housing; a sensor connected to said housing for measuring said predetermined parameter representative of the weather prevailing in the environ of said sensor at the location where said portable, battery-powered weather station may be deployed; an antenna; means for setting station ID; and a processor-controlled transmitter mounted in the housing and coupled to said sensor and said antenna repetitively operative (1) to compile a data packet having first information representative of station ID, second information representative of said weather parameter sensed by said sensor at said location where said portable, battery-powered and hand-holdable weather station may be deployed, and third information that enables the remote battery-powered base weather station to determine time-of-next transmission allowing the same to enter battery-power-conserving mode until that time, and operative (2) to transmit said data packet to said portable, battery-powered base weather station; and

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17           a portable, battery-powered base weather station adapted for home and office use operative  
18       in response to receipt of a data packet transmitted by said portable, battery-powered and hand-  
19       holdable remote weather station to recover said first information and display said sensed weather  
20       parameter, and to recover said third information and go into battery power conserving mode until  
21       the time of transmission of the next data packet expected from said portable, battery-powered and  
22       hand-holdable remote weather station.

Claims 6-8 (canceled)